

IN THE CLAIMS:

Claim 1 (canceled).

Claim 2 (currently amended): A high frequency piezoelectric resonator, the piezoelectric resonator including a piezoelectric plate having disposed on its main surfaces, respectively, mutually opposing main electrode for the excitation and at least one second electrode disposed surrounding the peripheral edge of its corresponding main electrode with a gap in between, wherein:

the material of the main electrode and the material of the second electrode are different from each other; and

~~according to claim 1, wherein~~ the density of the material of the second electrode is made lower than that of the main electrode; and wherein $f_1 < f_3 < f_2$ is satisfied in which a cutoff frequency of the main electrode is f_1 , a cutoff frequency of the gap is f_2 , and a cutoff frequency of the second electrode is f_3 .

Claim 3 (currently amended): A high frequency piezoelectric resonator according to claim ~~1 or~~ 2, wherein the piezoelectric plate is made of a piezoelectric plate having formed therein a recess.

Claim 4 (currently amended): A high frequency piezoelectric resonator according to ~~claims 1 or~~ claim 2 or 3, wherein the configuration of the main electrode is made elliptic.

Claim 5 (currently amended): A high frequency piezoelectric resonator including a piezoelectric plate, one main surface of the piezoelectric plate being recessed to thereby form a thin portion therein, the main surface opposing the recess corresponding to the thin portion having thereon at its central portion a convex portion formed integrally with the piezoelectric plate, the convex portion having formed thereon a main electrode for the excitation, a lead electrode being extended from the main electrode toward an edge of the plate, a second electrode being so provided as to surround the main electrode and the lead electrode with a gap in between, the piezoelectric plate having applied on a recess side thereof an entire electrode; and wherein $f_1 < f_3 < f_2$ is satisfied in which a cutoff frequency of the main electrode is f_1 , a cutoff frequency of the gap is f_2 , and a cutoff frequency of the second electrode is f_3 .

Claim 6 (original): A high frequency piezoelectric resonator according to claim 5, wherein the convex portion is made elliptic.

Claim 7 (currently amended) A high frequency piezoelectric resonator according to claim 1 or 2, wherein

said at least one second electrode is divided into a plurality of portions; and
adjustment of frequency is performed on said at least one ~~second~~ divided electrode
so that ~~frequency of each one of electrode portions of said at least one of the divided~~
~~second electrode has a uniformity~~ said divided electrodes have equivalent frequency one
another.

Claim 8 (previously added): A high frequency piezoelectric resonator according to claim 3, wherein the configuration of the main electrode is made elliptic.

Claim 9 (currently amended): A high frequency piezoelectric resonator according to claim 3, wherein

said at least one second electrode is divided into a plurality of portions; and
adjustment of frequency is performed on said at least one ~~second~~ divided electrode
so that ~~frequency of each one of electrode portions of said at least one of the divided~~
~~second electrode has a uniformity~~ said divided electrodes have equivalent frequency one
another.

Claim 10 (currently amended): A high frequency piezoelectric resonator according to claim 4, wherein

said at least one second electrode is divided into a plurality of portions; and
adjustment of frequency is performed on said at least one ~~second~~ divided electrode
so that ~~frequency of each one of electrode portions of said at least one of the divided~~
~~second electrode has a uniformity~~ said divided electrodes have equivalent frequency one
another.

Claim 11 (currently amended): A high frequency piezoelectric resonator according to claim 8, wherein

said at least one second electrode is divided into a plurality of portions; and
adjustment of frequency is performed on said at least one ~~second~~ divided electrode
so that ~~frequency of each one of electrode portions of said at least one of the divided~~
~~second electrode has a uniformity~~ said divided electrodes have equivalent frequency one
another.

Claim 12 (currently amended): A high frequency piezoelectric resonator according to claim 5 or 6, wherein

said ~~at least one~~ second electrode is divided into a plurality of portions; and

adjustment of frequency is performed on said at least one ~~second~~ divided electrode so that ~~frequency of each one of electrode portions of said at least one of the divided second electrode has a uniformity~~ said divided electrodes have equivalent frequency one another.